IN THE SPECIFICATION

Page 1, lines 5-7 have been amended as follows:

The present invention relates to energy conversion and more particularly to an apparatus **[[of]]** **for** converting ocean wave energy into electric power with improved characteristics.

Page 1, lines 9-24 have been amended as follows:

[[As]] **It is** known that **waves** ~~**wave can**~~ move up and down or back and forth **[[in]]** **with** a curving motion. Ocean wave power ~~**plant is thus**~~ **plants have been** developed by placing a power generator unit on a float in the sea. Electricity is generated by the generator by absorbing energy of waves as **the** waves continuously move therethrough. Conventionally, a hydraulic turbine or gas turbine is installed in a ~~**ocean**~~ wave power generator. A turbine is a rotary device per se. This gives an impression ~~**to people**~~ that electricity can be generated only by a turbine or the like. The prior turbine based electricity generation suffered from several disadvantages. For example, energy of waves is converted into high pressure liquid or air which in turn impinges **the** vanes of a hydraulic turbine or gas turbine for rotating the same. Finally, the generator is driven by the hydraulic turbine or gas turbine for generating electricity. Such multiple energy conversions can consume energy significantly, i.e., lower energy conversion efficiency. Further, **[[it]]** **they** can complicate the electric generation system, resulting in an increase in the installation and maintenance costs. ~~**Furthermore, the turbine can be eliminated for simplifying construction as viewed by the present inventor.**~~

Page 1, line 25 through page 2, line 13 have been amended as follows:

~~**Other prior art have been found in a search as below. For example,**~~ U.S. Pat. No. 4,178,517 disclosed a process for conversion of ocean wave energy into electric power and **an** apparatus in which wave motion is used to vary the pressure of hydrogen gas in one of the cavities of a two-cavity chamber. The resulting imbalance of pressures in the cavities is relieved by conduction of hydrogen ions through a protonic conductor separating the cavities, and by conduction of electrons through an external circuit, enabling hydrogen gas to be formed on the low-pressure side of the chamber. The conduction of electrons constitutes an electric current. Also, U.S. Pat. No. 5,136,173 disclosed an ocean wave energy conversion system in which electricity is generated by flowing sea water through a magnet hydrodynamic electric generator. Both ~~**prior arts**~~ **patents** have the generator installed under sea level. This is not desirable ~~**as viewed by the present inventor. Moreover, the present**~~

~~invention is still distinguished from both prior art even they also do not employ the turbine as the present invention~~.

Thus, continuing improvements in the exploitation of the conversion of ocean wave energy into electric power are constantly being sought.

Page 2, line 15 through page 3, line 4 have been amended as follows:

It is an object of the present invention to provide an apparatus **[[of]]** **for** converting ocean wave energy into electric power**.** **A** ~~, comprising a~~ floating section ~~comprising~~ **includes** a float adapted to ride on the surface of the ocean in reciprocal vertical motion in response to ocean wave front action **[[,]]** and a lever adapted to ride on the surface of the ocean**.** **The** **[[, the]]** lever ~~having~~ **has** one end coupled to the float**.** **A** ~~; and a~~ fixed section **is** mounted on a seacoast, ship, or production platform and ~~comprising~~ **includes** a fulcrum for ~~pivotably~~ **pivotally** supporting the lever**.** **A** **[[, a]]** magnet **is** coupled to the other end of the lever **and moveable therewith. A** **[[, a]]** plurality of parallel **stator** cores together with the magnet **form** ~~for forming~~ a magnetic circuit**.** **An** ~~, a plurality of parallel~~ electric ~~coils each~~ **coil is** wound on **each of** the ~~corresponding core, resilient~~ **stator cores. Resilient** means **are** adjacent the magnet **and** interconnected **to** the lever and the magnet**.** **A barrier is** ~~, a plurality of barriers each~~ disposed between **[[two]]** adjacent ~~ones of the~~ **stator** cores**.** **An** ~~, and support means, whereby an~~ upward motion of the float caused by the impact of waves will move the magnet downward by the leverage of the lever and **will** compress the resilient means**.** **Downward** ~~, a downward~~ motion of the float will move the magnet upward by the leverage of the lever and expand the resilient means**.** **Repetition** ~~and repeating~~ of the upward and the downward movements of the magnet will induce a voltage in the electric coils.

Page 3, lines 5-19 have been amended as follows:

It is another object of the present invention to provide an apparatus **[[of]]** **for** converting ocean wave energy into electric power**.** **Support** ~~, comprising support~~ means **are** mounted on a fixed section mounted on a dam, seacoast, or breakwater**.** **An** **[[, an]]** intermediate vibration member ~~having~~ **has** a lower portion submerged in the seawater**.** **The intermediate** **[[, the]]** vibration member ~~including~~ **includes** a driving shaft rotatably coupled to the support means**.** **A** **[[, a]]** magnet **is** on top of the vibration member**.** **A** **[[, a]]** plurality of parallel **stator** cores together with the magnet **form** ~~for forming~~ a magnetic circuit**.** **An** ~~, a plurality of parallel~~ electric ~~coils each~~ **coil is** wound on **each of** ~~the corresponding core,~~

~~left~~ **stator cores. Left** and right resilient means **are disposed** adjacent the **magnet** ~~vibration member~~ and coupled to the intermediate vibration member**. A barrier is** ~~, and a plurality of barriers each~~ disposed between **[[two]]** adjacent ~~ones of the~~ **stator** cores~~, whereby a vibration~~ **. Sideways movement** of the vibration member caused by the impact of waves will compress **one of** the ~~left~~ resilient means ~~and expand~~ **while expanding** the ~~right~~ **other** resilient means via the driving shaft so as to move the magnet ~~, and repeating of the movement~~ **Repetition of sideways movements** of the magnet will induce a voltage in the electric coils.

Page 3, line 24 through page 4, line 1 have been amended as follows:

FIG. 1 schematically depicts a top plan view of a first preferred embodiment of **an** ocean wave energy conversion apparatus according to the invention;

FIG. 2 schematically depicts a front view of the apparatus shown in FIG. 1;

FIG. 3 schematically depicts a front view of a second preferred embodiment of **an** ocean wave energy conversion apparatus according to the invention;

Page 4, lines 4-6 have been amended as follows:

FIG. 5 schematically depicts a top plan view of electrically connecting an external power source to the coil for providing **an** additional magnetic field according to the invention.

Page 4, lines 8-20 have been amended as follows:

Referring to FIGS. 1 and 2, there is shown an apparatus constructed in accordance with a first preferred embodiment of the invention. The apparatus comprises a float 4 adapted to ride on the surface of the ocean in reciprocal vertical motion in response to ocean wave front action, and a lever 5 also adapted to ride on the surface of the ocean**. The [[, the]]** lever 5 ~~having~~ **has** one end coupled to the float 4. On a seacoast, ship, or production platform, the apparatus further comprises a fulcrum 6 ~~for pivotably~~ **pivotally** supporting the lever 5**. A [[, a]]** magnet 1 **is** coupled to the other end of the lever 5**. A [[, a]]** plurality of (three **shown**) parallel **stator** cores 2 together with the magnet 1 ~~for forming~~ **form** a magnetic circuit**. A [[, a]]** plurality of (three **shown**) parallel electric coils 3 **[[each]] are** wound on the **stator cores [[core]]** 2**. A [[, a]]** spring 7 **is located** adjacent the magnet 1 **and** interconnected **to** the lever 5 and the magnet 1**. Each of [[,]]** a plurality of barriers 8 **[[each]] is** disposed between **[[two]]** adjacent ~~ones of the~~ **stator** cores 2~~, and a support mechanism (not shown)~~.

Page 4, line 21 through page 5, line 3 have been amended as follows:

The characteristics of the first preferred embodiment are detailed below. The conventional hydraulic turbine or gas turbine is not provided. In operation, ~~an~~ upward motion of the float 4 caused by the impact of waves will cause the magnet 1 to move downward by the leverage of the lever 5 and ~~compress~~ **compresses** the spring 7 simultaneously. Further, ~~a~~ downward motion of the float 4 will cause the magnet 1 to move upward by the leverage of the lever 5 and ~~expand~~ **expands** the spring 7 simultaneously. Such reciprocal motion of the magnet 1 will induce a voltage (i.e., current) in the coils 3 since the coils 3 cut lines of magnetic flux (i.e., magnetic flux change). As a result, electricity is generated by ocean wave energy.

Page 5, lines 4-15 have been amended as follows:

Referring to FIGS. 3 and 4, there is shown an apparatus constructed in accordance with a second preferred embodiment of the invention. The apparatus comprises a support mechanism 9 mounted on **a** seacoast, dam, or breakwater**. A [[, a]]** vibration member 10 ~~having~~ **has** a lower portion submerged in the seawater**. The [[, the]]** vibration member 10 ~~including~~ **includes** a driving shaft 11 rotatably coupled to the support mechanism 9**. A [[, a]]** magnet 1 **is located** on top of the vibration member 10**. A [[, a]]** plurality of (three **shown**) parallel **stator** cores 2 **are** on top of the support mechanism 9**. The stator [[, the]]** cores 2 together with the magnet 1 ~~for forming~~ **form** a magnetic circuit**. A [[, a]]** plurality of (three **shown**) parallel electric coils 3 **are** wound on the **stator** cores 2**. A [[, a]]** left spring 71 and a right spring 72 ~~both adjacent the vibration member 10 and~~ **are** coupled to the ~~intermediate~~ vibration member 10, **with the intermediate vibrator member 10 being intermediate the springs 71 and 72. Each of [[and]]** a plurality of barriers 8 **[[each]] is** disposed between **[[two]]** adjacent ~~ones of the~~ **stator** cores 2**. As shown, the springs 71 and 72 act between the intermediate vibration member 10 and the parts 13 of the support mechanism 9.**

Page 5, lines 16-24 have been amended as follows:

The characteristics of the second preferred embodiment are detailed below. Also, the conventional hydraulic turbine or gas turbine is not provided. In operation, ~~a vibration~~ **movement** of the vibration member 10 ~~caused by the impact of waves~~ **in one direction**

about the axis of the driving shaft 11 will compress the left spring 71 and expand the right spring 72 simultaneously ~~via the transmission of the driving shaft 11~~. **Movement of the vibration member 10 in the opposite direction will compress the right spring 72 and expand the left spring 71 simultaneously. In** ~~And in~~ turn, the magnet 1 moves. Such reciprocal motion of the magnet 1 will induce a voltage (i.e., current) in the coils 3 since the coils 3 cut **the** lines of magnetic flux (i.e., magnetic flux change). As a result, electricity is generated by ocean wave energy.

Page 5, line 25 through page 6, line 8 have been amended as follows:

According to Faraday's law of induction, **the** induced voltage is proportional to the number of coil turns. However, **the** electrical resistance is also proportional to the number of coil turns. Hence, it is ~~preferably~~ **preferable** to increase the diameter of **the** coil for significantly reducing **the** electrical resistance as the number of coil turns increases. Moreover, **the** induced voltage is also proportional to **the** magnetic flux change in the coil. Also, **the** magnetic flux is proportional to **the** magnetic intensity, **the** cross-section of **the** magnetic circuit, and **the** magnetic permeability of **the** magnetic circuit. Thus, increase of **the** magnetic permeability, **the** cross-section of **the** magnetic circuit, and **the** magnetic inductivity of magnetic circuit can increase induced voltage. In addition, an increase ~~of moving speed~~ **in the rate of movement** of the magnet can increase **the** magnetic flux change.

Page 6, lines 9-20 have been amended as follows:

In the first preferred embodiment, ~~a moving~~ **the** distance **of movement** of the float 4 will be equal to that of the magnet 1 in **[[one]]** upward or downward movement if there is no provision of the lever 5. Fortunately as devised by the **present** invention, ~~a moving~~ **the** distance **of movement** of the magnet 1 is ~~larger~~ **greater** than that of the float 4 in **[[one]]** upward or downward movement since the distance from the magnet 1 to the fulcrum 6 is ~~larger~~ **greater** than the distance from the float 4 to the fulcrum 6 as taught by leverage. Accordingly, **the** magnetic flux change in the magnetic circuit can be increased significantly. Likewise, in the second preferred embodiment, ~~a~~ **the** distance from the driving shaft 11 to the magnet 1 at **the** top of the vibration member 10 is ~~larger~~ **greater** than ~~a~~ **the** distance from the driving shaft 11 to ~~a~~ **the** bottom of the vibration member 10 as devised by the **present** invention. This **[[can]]** also **increases** ~~increase a moving speed~~ **the amount of movement** of the magnet 1 and thus **increases** ~~increase~~ **the** magnetic flux change in the magnetic circuit.

Page 6, line 21 through page 7, line 6 have been amended as follows:

Additionally, **the** induced voltage will be smaller if the electric coils 3 are not wound on the **stator** cores 2 since **the** magnetic permeability of air is very small. Fortunately, **the** induced voltage will be very large since the **stator** core 2 has a high magnetic permeability as embodied in each of the first and second preferred embodiments. In a case that there is only one pair of magnet 1 and **stator** core 2, no line of magnetic flux will be cut when the magnet 1 leaves the effective magnetic area of the **stator** core 2. That is, **the** magnetic flux is not changed and thus there is no induced voltage. This is not desirable. Thus, as stated above, a plurality of parallel sets of **stator** cores 2 and electric coils 3 are provided by the **present** invention in which each of the plurality of barriers 8 is disposed between two adjacent **stator** cores 2. Hence, **the** magnetic flux change can be increased significantly. Preferably, ~~a~~ **the** cross-section of the magnet 1 is about the same as that of the **stator** core 2 so as to obtain ~~a~~ **the** maximum magnetic flux change in operation.

Page 7, lines 7-13 have been amended as follows:

A small voltage will be induced if the magnet 1 is a permanent magnet due to smaller magnetic intensity. Fortunately, referring to FIG. 5, as embodied by the **present** invention, the magnet 1 is formed of the same ferromagnetic material as the **stator** core 2 with **the** magnetic field around each of the **stator** cores 2 **[[is]]** generated by another electric coil 31 wound thereon. The coil 31 is in turn electrically coupled to an external power source 12. As a result, **the** induced voltage is greatly increased due to **the** larger magnetic flux change.

Page 7, lines 14-17 have been amended as follows:

As to the problem of unstable electricity generated by **an** ocean wave energy conversion process as experienced in the prior art, it can be solved by many commercially available, advanced power electronic devices. This is similar to **those used in connection with** wind turbine electricity production.